



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,211	03/08/2001	Bruce Bryan	24729-105G	7925

7590 11/03/2004

ALAN G. TOWNER
PIETRAGALLO, BOSICK & GORDON
ONE OXFORD CENTRE
38th FLOOR
PITTSBURGH, PA 15219

EXAMINER

HELMER, GEORGIA L

ART UNIT	PAPER NUMBER
----------	--------------

1638

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/803,211	Applicant(s) BRYAN, BRUCE	
	Examiner Georgia L. Helmer	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-27 is/are pending in the application.
- 4a) Of the above claim(s) 5-15 and 21-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 11-15 and 21-27 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 August 2004 has been entered.

Status of the Claims

2. Claims 1-4 have been cancelled. New claims 11-27 have been added. Claims 11-15 and 21-27 are nonelected, as discussed below. Claims 5-27 are pending. Claims 5-15 and 21-27 are withdrawn. Claims 16-20 are examined in the instant action.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

4. Newly submitted claims 11-15 and 21-27 are directed to inventions that are independent or distinct from the invention originally claimed for the following reasons: Claims 11-15 are drawn to transgenic plants, class 800, subclass 295, for example, and claims 21-27 are drawn to a method of producing a glowing plant, class 800, subclass 278. Claims 16-20, are drawn to a comprising comprising a transgenic bioluminescent plant and a plant food.

Art Unit: 1638

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims (16-20) are examined in the instant action and claims 11-15, and claims 21-27 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112 second

5. Claims 16-20 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

Claim 16, line 5, recites "one other component", however no "component" has been recited. Accordingly, this term lacks antecedent basis. Claim 17 recites living transgenic bioluminescent "visible by the unassisted eye" which is indefinite. Does this mean that any one wearing corrective lenses would not qualify for this visibility test? Also, it is known that "visibility" varies with the specific organism, light source, light quantity, light quality, length of exposure for example.

Correction/ clarification is required.

Claim Rejections - 35 USC § 102

6. Claims 16-20 are rejected under 35 USC 102 (b) as being anticipated by Mayerhofer, et al. (Expression of recombinant Renilla Luciferase in transgenic

Art Unit: 1638

plants results in high levels of light emission. Plant Journal, 1995, Vol 7, No. 6, pages 1031-1038.)

7. Mayerhofer, et al. teach a combination comprising a living transgenic bioluminescent tobacco, potato or tomato plant that expresses Renilla luciferase (p. 1032, 1st ¶), part of a bioluminescent generating system, and a plant food comprising luciferin (p. 1037, column 2), wherein supplying the plant food to the transgenic plant causes the plant to illuminate.

Renilla, a coelenterate, is a sea pansy, which is a marine organism (claim 16, 17, 18 19). The transgenic plant does not produce light until both components of the bioluminescent generating system, luciferase and luciferin, are present simultaneously. Applicant's defines "bioluminescent generating system" (column 11, lines 44-48) as the set of reagents required for a bioluminescent producing reaction. Applicant's specification defines plant food as "any liquids... applied to a plant to promote or maintain growth" (column 72, lines 34-41) which encompasses water. Claim 17 recites illumination "visible by the unassisted eye", terms which are indefinite, as discussed above in §112.2. For this reason, these terms are given no patentable weight. Claims 20 is drawn to a plant food which is a fertilizer. The specification refers to "fertilizers as containing any ratio of N, K, and of ...that is applied to a plant to promote or maintain growth" (column 72, lines 34-41), which encompasses water.

Accordingly, Mayerhofer, et al. anticipates the claimed invention.

Art Unit: 1638

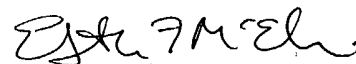
REMARKS

8. No claims are allowed, give the success of Mayerhofer, et al.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia L. Helmer whose telephone number is 571-272-0976. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 571-272-0804. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Georgia L. Helmer
Patent Examiner
Art Unit 1638
November 1, 2004


ELIZABETH MCELWAIN
PRIMARY EXAMINER